

Amendments to the Specification:

Please replace the paragraph beginning on page 23, line 17, with the following amended paragraph:

When a determination is made ~~instruction cache 300~~ determines that an instruction associated with an indicator is present ~~in instruction cache 300~~, a signal is sent to indicate that a marked instruction is being executed. In these examples, a marked instruction is an instruction associated with a performance indicator. Alternatively, a performance indicator may indicate that all items or instructions in a bundle are marked to be counted. Additionally, signals for these instructions are sent ~~by instruction cache 300~~ to the appropriate functional unit. Depending on the particular implementation, a functional unit other than performance monitor unit 306 may count execution of instructions. In the case that the performance indicators are in the instructions, or in the bundles, the indicators are detected within the cache unit, instruction cache 300, ~~detects the indicators and sends signals are sent~~ to performance monitor unit 306.

Please replace the paragraph beginning on page 32, line 6, with the following amended paragraph:

With reference next to **Figure 11**, a flowchart of a process for selective counting of instructions is depicted in accordance with a preferred embodiment of the present invention. The process illustrated in **Figure 11** may be implemented in conjunction with an instruction cache, such as instruction cache 214 in **Figure 2**.

Please replace the paragraph beginning on page 33, line 14, with the following amended paragraph:

With reference next to **Figure 12**, a flowchart of a process for selective counting of instructions is depicted in accordance with a preferred embodiment of the present invention. The process illustrated in **Figure 12** may be implemented in conjunction with an instruction cache, such as instruction cache 214 in **Figure 2**.

Please replace the paragraph beginning on page 34, line 6, with the following amended paragraph:

Turning now to **Figure 13**, a flowchart of a process for identifying instructions exceeding a threshold is depicted in accordance with a preferred embodiment of the present invention. The process illustrated in **Figure 13** may be implemented in conjunction with an instruction cache, such as instruction cache 214 in **Figure 2**.